

## IN THE CLAIMS

Please cancel claims 33-36, 40-43, 46-50, 53, and 56.

Please amend claims 37, 38, 54 and 57 as set forth below.

A complete listing of all claims in this application is set forth below.

Claims 1-36 (canceled).

37. (currently amended) A catheter system, comprising:

a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween;

a tube segment having a distal tube orifice, a proximal tube orifice and a tube lumen extending therebetween;

a pusher attached to said tube segment; and

a closure member attached to said pusher, said closure member configured to couple to said guide catheter,

wherein said tube segment extends through said distal guide orifice,

wherein said proximal tube orifice is positioned within said guide lumen,

wherein said distal tube orifice is positioned outside of said guide lumen,

and

wherein said pusher includes: (i) a swivel, (ii) an upper pusher portion interposed between said closure member and said swivel, and (iii) a lower pusher portion interposed between said swivel and said tube segment.

38. (currently amended) A catheter system, comprising:

- a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween;
- a tube segment having a distal tube orifice, a proximal tube orifice and a tube lumen extending therebetween;
- a pusher attached to said tube segment; and
- a closure member attached to said pusher, said closure member configured to couple to said guide catheter,

wherein said tube segment extends through said distal guide orifice,  
wherein said proximal tube orifice is positioned within said guide lumen,  
wherein said distal tube orifice is positioned outside of said guide lumen,  
wherein said guide catheter includes a sideport branch which defines a sideport lumen, and

wherein said pusher is positioned within said sideport branch and said guide lumen.

Claims 39-43 (canceled).

44. (previously amended) A catheter system, comprising:

a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween; and

an insert assembly at least partially positioned within said guide catheter, said insert assembly including (i) a tube segment having a proximal tube orifice located in said guide lumen, and a distal tube orifice located outside of said guide lumen, and (ii) a pusher attached to said tube segment, wherein movement of said pusher causes movement of said tube segment,

wherein said pusher includes: (i) a swivel, (ii) an upper pusher portion interposed between said closure member and said swivel, and (iii) a lower pusher portion interposed between said swivel and said tube segment.

45. (previously amended) A catheter system, comprising:

a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween; and

an insert assembly at least partially positioned within said guide catheter, said insert assembly including (i) a tube segment having a proximal tube orifice located in said guide lumen, and a distal tube orifice located outside of said guide lumen, and (ii) a pusher attached to said tube segment,

wherein movement of said pusher causes movement of said tube segment,

wherein said guide catheter includes a sideport branch which defines a sideport lumen, and

wherein said pusher is positioned within said sideport branch and said guide lumen.

Claims 46-50 (canceled).

51. (previously amended) A catheter system, comprising:

- a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween; and
- an inner conduit having (i) a proximal conduit orifice located in said guide lumen, (ii) a distal conduit orifice located outside of said guide lumen, and (iii) a conduit lumen extending between said proximal conduit orifice and said distal conduit orifice;
- a pusher attached to said conduit, wherein movement of said pusher causes movement of said inner conduit; and
- a closure member attached to said pusher, said closure member configured to couple to said guide catheter,

wherein said pusher includes: (i) a swivel, (ii) an upper pusher portion interposed between said closure member and said swivel, and (iii) a lower pusher portion interposed between said swivel and said tube segment.

52. (previously amended) A catheter system, comprising:

- a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween;
- an inner conduit having (i) a proximal conduit orifice located in said guide lumen, (ii) a distal conduit orifice located outside of said guide lumen, and (iii) a conduit lumen extending between said proximal conduit orifice and said distal conduit orifice; and
- a pusher attached to said conduit, wherein movement of said pusher causes movement of said inner conduit,

wherein said guide catheter includes a sideport branch which defines a sideport lumen, and

wherein said pusher is positioned within said sideport lumen and said guide lumen.

Claim 53 (canceled).

54. (currently amended) ~~The catheter system of claim 53, further~~  
~~comprising~~ A catheter system, comprising:  
a guide catheter having a distal guide orifice, a proximal guide orifice, and  
a guide lumen extending therebetween; and  
a tube segment having a distal tube orifice, a proximal tube orifice and a  
tube lumen extending therebetween; and  
a pusher attached to said tube segment, wherein movement of said  
pusher causes movement of said tube segment,  
wherein said tube segment extends through said distal guide orifice,  
wherein said proximal tube orifice is positioned within said guide lumen,  
wherein said distal tube orifice is positioned outside of said guide lumen,  
and  
wherein fluid advancing into said catheter system through said proximal  
guide orifice (i) contacts an interior surface of said guide catheter that defines  
said guide lumen, (ii) advances through said proximal tube orifice, (iii) advances  
through said tube lumen, and (iv) advances out of said catheter system through  
said distal tube orifice.

55. (previously presented) A catheter system, comprising:

a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween; and

an insert assembly at least partially positioned within said guide catheter, said insert assembly including (i) a tube segment having a proximal tube orifice located in said guide lumen, and a distal tube orifice located outside of said guide lumen, and (ii) a pusher attached to said tube segment,

wherein movement of said pusher causes movement of said tube segment,

wherein fluid advancing into said catheter system through said proximal guide orifice (i) contacts an interior surface of said guide catheter that defines said guide lumen, (ii) advances into said tube segment through said proximal tube orifice, and (iii) advances out of said catheter system through said distal tube orifice.

Claim 56 (canceled).

57. (currently amended) ~~The catheter system of claim 56, further comprising~~ A catheter system, comprising:

a guide catheter having a distal guide orifice, a proximal guide orifice, and a guide lumen extending therebetween;

an inner conduit having (i) a proximal conduit orifice located in said guide lumen, (ii) a distal conduit orifice located outside of said guide lumen, and (ii) a conduit lumen extending between said proximal conduit orifice and said distal conduit orifice; and

a pusher attached to said inner conduit, wherein movement of said pusher causes movement of said inner conduit,

wherein fluid advancing into said catheter system through said proximal guide orifice (i) contacts an interior surface of said guide catheter that defines said guide lumen, (ii) advances through said proximal conduit orifice, (iii) advances through said conduit lumen, and (iv) advances out of said catheter system through said distal conduit orifice.